

Contents of MSP430x11x1, MSP430F21x1 Code Examples (slac011.zip) - .asm (CCS), .s43 (IAR), and .c (CCS & IAR)

Link to zip file: <http://www.ti.com/lit/zip/slac011>

Applicable Devices: MSP430F1101A, MSP430F111A, MSP430F1121A, MSP430F2101, MSP430F2111, MSP430F2121, MSP430F2131

Consult readme.txt included in the zip file for disclaimer and coding style guidelines

Contents:

- [Assembly Code Examples \(.asm, CCS compatible\)](#)
- [Assembly Code Examples \(.s43, IAR compatible\)](#)
- [C Code Examples \(.c, IAR & CCS compatible\)](#)

.asm code examples – CCS	
File name	Description
MSP430x11x1_1.asm	MSP430x11x1 - Software Toggle P1.0
MSP430x11x1_164.asm	MSP430x11x1 - Software SPI Interface to HC164 Shift Register
MSP430x11x1_165.asm	MSP430x11x1 - Software Interface to HC165 Shift Register
MSP430x11x1_1820.asm	MSP430x11x1 - Software 1-Wire Interface DS1820, .set P1.0 if > 30C
MSP430x11x1_549.asm	MSP430x11x1 - Software SPI Interface TLC549, .set P1.0 if > 0.5*Vcc
MSP430x11x1_5616.asm	MSP430x11x1 - Software SPI Interface to TLV5616 12-Bit DAC
MSP430x11x1_5timers.asm	MSP430x11x1 - 5 Interrupt Timers & 2 Clock Outputs, 32kHz ACLK
MSP430x11x1_7822.asm	MSP430x11x1 - Software Interface to Read ADS7822
MSP430x11x1_831.asm	MSP430x11x1 - Software SPI Interface to TLV0831
MSP430x11x1_8574.asm	MSP430x11x1 - Software I2C Master Interface to PCF8574, Read/Write
MSP430x11x1_ca_01.asm	MSP430x11x1 - Comp_A, Output Reference Voltages on P2.3
MSP430x11x1_ca_02.asm	MSP430x11x1 - Comp_A, Detect Threshold, .set P1.0 if P2.3 > 0.25*Vcc
MSP430x11x1_ca_03.asm	MSP430x11x1 - Comp_A, Simple 2.2V Low Battery Detect
MSP430x11x1_ca_04.asm	MSP430x11x1 - Comp_A, Slope ADC to Detect Temp Lvl, .set P1.0 > 25C
MSP430x11x1_ca_05.asm	MSP430x11x1 - Comp_A, Thermometer 59-99 F
MSP430x11x1_ca_06.asm	MSP430x11x1 - Comp_A, Thermometer 0-50 C
MSP430x11x1_ca_07.asm	MSP430x11x1 - Comp_A, Resistance Meter
MSP430x11x1_clks.asm	MSP430x11x1 - Basic Clock, Output Buffered SMCLK, ACLK and MCLK/10
MSP430x11x1_flashwrite_01.asm	MSP430x11x1 - Flash In-System Programming, Copy SegA to SegB
MSP430x11x1_fll_01.asm	MSP430x11x1 - Basic Clock, Implement Auto RSEL SW FLL
MSP430x11x1_fll_02.asm	MSP430x11x1 - Basic Clock, Implement Cont. SW FLL with Auto RSEL
MSP430x11x1_hfxtal.asm	MSP430x11x1 - Basic Clock, MCLK Sourced from HF XTAL
MSP430x11x1_hfxtal_nmi.asm	MSP430x11x1 - Basic Clock, MCLK Configured with HF XTAL & Osc Fault
MSP430x11x1_lpm3.asm	MSP430x11x1 - Basic Clock, LPM3 Using WDT ISR, 32kHz ACLK
MSP430x11x1_nmi.asm	MSP430x11x1 - Basic Clock, Configure RST/NMI as NMI
MSP430x11x1_p2_int.asm	MSP430x11x1 - Software Port Interrupt on P2.0 from LPM4
MSP430x11x1_p2_poll.asm	MSP430x11x1 - Software Poll P2.0, .set P1.0 if P2.0 = 1
MSP430x11x1_r2r.asm	MSP430x11x1 - Software Output 6-Bit R2R DAC
MSP430x11x1_rosc.asm	MSP430x11x1 - DCOCLK Biased with External Resistor Rosc
MSP430x11x1_selftest.asm	MSP430x11x1 - Use JTAG for Downloadable Test Code
MSP430x11x1_ta_01.asm	MSP430x11x1 - Timer_A, Toggle P1.0, CCR0 Cont. Mode ISR, DCO SMCLK
MSP430x11x1_ta_02.asm	MSP430x11x1 - Timer_A, Toggle P1.0, CCR0 Up Mode ISR, DCO SMCLK
MSP430x11x1_ta_03.asm	MSP430x11x1 - Timer_A, Toggle P1.0, Overflow ISR, DCO SMCLK
MSP430x11x1_ta_04.asm	MSP430x11x1 - Timer_A, Toggle P1.0, Overflow ISR, 32kHz ACLK
MSP430x11x1_ta_05.asm	MSP430x11x1 - Timer_A, Toggle P1.0, CCR0 Up Mode ISR, 32kHz ACLK
MSP430x11x1_ta_06.asm	MSP430x11x1 - Timer_A, Toggle P1.0, CCR1 Cont. Mode ISR, DCO SMCLK
MSP430x11x1_ta_07.asm	MSP430x11x1 - Timer_A, Toggle P1.0-3, Cont. Mode ISR, DCO SMCLK
MSP430x11x1_ta_08.asm	MSP430x11x1 - Timer_A, Toggle P1.0-3, Cont. Mode ISR, 32kHz ACLK
MSP430x11x1_ta_09.asm	MSP430x11x1 - Timer_A, Toggle P1.0-3, Cont. Mode ISR, HF XTAL ACLK
MSP430x11x1_ta_10.asm	MSP430x11x1 - Timer_A, Toggle P1.1/TA0, Up Mode, DCO SMCLK

MSP430x11x1_ta_11.asm	MSP430x11x1 - Timer_A, Toggle P1.1/TA0, Up Mode, 32kHz ACLK
MSP430x11x1_ta_12.asm	MSP430x11x1 - Timer_A, Toggle P1.1/TA0, Up Mode, HF XTAL ACLK
MSP430x11x1_ta_13.asm	MSP430x11x1 - Timer_A, Toggle P1.1/TA0, Up/Down Mode, DCO SMCLK
MSP430x11x1_ta_14.asm	MSP430x11x1 - Timer_A, Toggle P1.1/TA0, Up/Down Mode, 32kHz ACLK
MSP430x11x1_ta_15.asm	MSP430x11x1 - Timer_A, Toggle P1.0, CCRO Up Mode ISR, 32kHz ACLK
MSP430x11x1_ta_16.asm	MSP430x11x1 - Timer_A, PWM TA1-2, Up Mode, DCO SMCLK
MSP430x11x1_ta_17.asm	MSP430x11x1 - Timer_A, PWM TA1-2, Up Mode, 32kHz ACLK
MSP430x11x1_ta_18.asm	MSP430x11x1 - Timer_A, PWM TA1-2 Up Mode, HF XTAL ACLK
MSP430x11x1_ta_19.asm	MSP430x11x1 - Timer_A, PWM TA1-2, Up/Down Mode, DCO SMCLK
MSP430x11x1_ta_20.asm	MSP430x11x1 - Timer_A, PWM TA1-2, Up/Down Mode, 32kHz ACLK
MSP430x11x1_ta_21.asm	MSP430x11x1 - Timer_A, PWM TA1-2, Up/Down Mode, HF XTAL ACLK
MSP430x11x1_ta_22.asm	MSP430x11x1 - Timer_A, Output 40kHz Square Wave, Up Mode, DCO SMCLK
MSP430x11x1_ta_23.asm	MSP430x11x1 - Timer_A, Ultra-Low Pwr 1200Hz Detect, ACLK +/- 5%
MSP430x11x1_ta_24.asm	MSP430x11x1 - Timer_A, Ultra-Low Pwr 1800Hz Detect, SMCLK +/- 1%
MSP430x11x1_ta_uart115k.asm	MSP430x11x1 - Timer_A, UART 115200 Echo, HF XTAL ACLK
MSP430x11x1_ta_uart19200_01.asm	MSP430x11x1 - Timer_A, UART 19200 Echo, HF XTAL ACLK
MSP430x11x1_ta_uart19200_02.asm	MSP430x11x1 - Timer_A, Ultra-Low Pwr UART 19200 Echo, 32kHz ACLK
MSP430x11x1_ta_uart19200_03.asm	MSP430x11x1 - Timer_A, UART 19200 Echo, 32kHz ACLK
MSP430x11x1_ta_uart19200_04.asm	MSP430x11x1 - Timer_A, Ultra-Low Pwr UART 19200 Echo, No XTAL ROSC
MSP430x11x1_ta_uart2400.asm	MSP430x11x1 - Timer_A, Ultra-Low Pwr UART 2400 Echo, 32kHz ACLK
MSP430x11x1_ta_uart9600_01.asm	MSP430x11x1 - Timer_A, UART 9600 Echo, HF XTAL ACLK
MSP430x11x1_ta_uart9600_02.asm	MSP430x11x1 - Timer_A, Ultra-Low Pwr UART 9600 Echo, 32kHz ACLK
MSP430x11x1_ta_uart9600_03.asm	MSP430x11x1 - Timer_A, UART 9600 Echo, 32kHz ACLK
MSP430x11x1_ta_uart9600_04.asm	MSP430x11x1 - Timer_A, Ultra-Low Pwr UART 9600 Echo, No XTAL, ROSC
MSP430x11x1_ta_uart9600_05.asm	MSP430x11x1 - Timer_A, Ultra-Low Pwr UART 9600 String, 32kHz ACLK
MSP430x11x1_ta_uart9600_06.asm	MSP430x11x1 - Timer_A, Ultra-Low Pwr UART 9600 Echo, 32kHz ACLK
MSP430x11x1_tmp100.asm	MSP430x11x1 - Software I2C Master Interface to TMP100
MSP430x11x1_tvrc5_rx.asm	MSP430x11x1 - Decode RC5 IR Remote Control, 32kHz ACLK
MSP430x11x1_tvrc5_rx2.asm	MSP430x11x1 - Decode RC5 IR Remote Control, No XTAL, Rosc
MSP430x11x1_tvrc5_tx.asm	MSP430x11x1 - Encode RC5 IR Remote Control, 32kHz ACLK
MSP430x11x1_tvrc5_tx2.asm	MSP430x11x1 - Encode RC5 IR Remote Control, No XTAL, Rosc
MSP430x11x1_wdt_01.asm	MSP430x11x1 - WDT, Toggle P1.0, Interval Overflow ISR, DCO SMCLK
MSP430x11x1_wdt_02.asm	MSP430x11x1 - WDT, Toggle P1.0, Interval Overflow ISR, 32kHz ACLK
MSP430x11x1_wdt_03.asm	MSP430x11x1 - WDT, Toggle P1.0, Interval Overflow ISR, HF XTAL ACLK
MSP430x21x1_02.asm	MSP430x21x1 - Reset on Invalid Address fetch, Toggle P1.0
MSP430x21x1_ca_08.asm	MSP430x21x1 - Comp_A, Millivolt Meter
MSP430x21x1_ca_CASHORT.asm	MSP430x21x1 - Comp_A, Simple 2.2V Low Battery Detect using CASHORT
MSP430x21x1_flashwrite_03.asm	MSP430x21x1 - Flash In-System Programming, Copy SegC to SegD
MSP430x21x1_fll_03.asm	MSP430x21x1 - Basic Clock, Implement Auto RSEL SW FLL
MSP430x21x1_HF_ExtACLK.asm	MSP430x21x1 - Basic Clock, MCLK Sourced from HF Digital source
MSP430x21x1_hfxtal.asm	MSP430x21x1 - Basic Clock, MCLK Sourced from HF XTAL
MSP430x21x1_HF_OFIFG_extclk.asm	MSP430x21x1 - OFIFG ISR for LF Failsafe Operation on Ext Clk
MSP430x21x1_HF_OFIFG_XTAL.asm	MSP430x21x1 - OFIFG ISR for LF Failsafe Operation
MSP430x21x1_Pull-up.asm	MSP430x21x1 - 21x1 Pull-up resistors demo
MSP430x21x1_ta_uart115k_12MHz.asm	MSP430x21x1 - Timer_A, UART 115200 Echo, 12MHz DCO SMCLK
MSP430x21x1_ta_uart115k_16MHz.asm	MSP430x21x1 - Timer_A, UART 115200 Echo, 16MHz DCO SMCLK
MSP430x21x1_ta_uart115k_8MHz.asm	MSP430x21x1 - Timer_A, UART 115200 Echo, 8MHz DCO SMCLK
MSP430x21x1_ta_uart9600_1MHz.asm	MSP430x21x1 - Timer_A, Ultra-Low Pwr UART 9600 Echo, 1MHz DCO SMCLK
MSP430x21x1_wdt_04.asm	MSP430x21x1 - WDT+ Failsafe Clock, DCO SMCLK

.s43 code examples – IAR

File name	Description
MSP430x11x1_1.s43	MSP430x11x1 - Software Toggle P1.0
MSP430x11x1_138.s43	MSP430x11x1 - Software Parallel Interface to HC138
MSP430x11x1_164.s43	MSP430x11x1 - Software SPI Interface to HC164 Shift Register
MSP430x11x1_165.s43	MSP430x11x1 - Software Interface to HC165 Shift Register
MSP430x11x1_1820.s43	MSP430x11x1 - Software 1-Wire Interface DS1820, Set P1.0 if > 30C
MSP430x11x1_4511.s43	MSP430x11x1 - Software Interface to CD4511 7-Segment Decoder
MSP430x11x1_549.s43	MSP430x11x1 - Software SPI Interface TLC549, Set P1.0 if > 0.5*Vcc
MSP430x11x1_5616.s43	MSP430x11x1 - Software SPI Interface to TLV5616 12-Bit DAC
MSP430x11x1_595.s43	MSP430x11x1 - Software SPI Interface to HC595 Shift Register
MSP430x11x1_5timers.s43	MSP430x11x1 - 5 Interrupt Timers & 2 Clock Outputs, 32kHz ACLK
MSP430x11x1_7822.s43	MSP430x11x1 - Software Interface to Read ADS7822
MSP430x11x1_831.s43	MSP430x11x1 - Software SPI Interface to TLV0831
MSP430x11x1_8574.s43	MSP430x11x1 - Software I2C Master Interface to PCF8574, Read/Write
MSP430x11x1_ca_01.s43	MSP430x11x1 - Comp_A, Output Reference Voltages on P2.3
MSP430x11x1_ca_02.s43	MSP430x11x1 - Comp_A, Detect Threshold, Set P1.0 if P2.3 > 0.25*Vcc
MSP430x11x1_ca_03.s43	MSP430x11x1 - Comp_A, Simple 2.2V Low Battery Detect
MSP430x11x1_ca_04.s43	MSP430x11x1 - Comp_A, Slope ADC to Detect Temp Lvl, Set P1.0 > 25C
MSP430x11x1_ca_05.s43	MSP430x11x1 - Comp_A, Thermometer 59-99 F
MSP430x11x1_ca_06.s43	MSP430x11x1 - Comp_A, Thermometer 0-50 C
MSP430x11x1_ca_07.s43	MSP430x11x1 - Comp_A, Resistance Meter
MSP430x11x1_clks.s43	MSP430x11x1 - Basic Clock, Output Buffered SMCLK, ACLK and MCLK/10
MSP430x11x1_flashwrite_01.s43	MSP430x11x1 - Flash In-System Programming, Copy SegA to SegB
MSP430x11x1_flashwrite_02.s43	MSP430x11x1 - Flash In-System Programming, Copy SegA to SegB, Blk
MSP430x11x1_fil_01.s43	MSP430x11x1 - Basic Clock, Implement Auto RSEL SW FLL
MSP430x11x1_fil_02.s43	MSP430x11x1 - Basic Clock, Implement Cont. SW FLL with Auto RSEL
MSP430x11x1_hfxtal.s43	MSP430x11x1 - Basic Clock, MCLK Sourced from HF XTAL
MSP430x11x1_hfxtal_nmi.s43	MSP430x11x1 - Basic Clock, MCLK Configured with HF XTAL & Osc Fault
MSP430x11x1_lpm3.s43	MSP430x11x1 - Basic Clock, LPM3 Using WDT ISR, 32kHz ACLK
MSP430x11x1_nmi.s43	MSP430x11x1 - Basic Clock, Configure RST/NMI as NMI
MSP430x11x1_P2_int.s43	MSP430x11x1 - Software Port Interrupt on P2.0 from LPM4
MSP430x11x1_P2_poll.s43	MSP430x11x1 - Software Poll P2.0, Set P1.0 if P2.0 = 1
MSP430x11x1_r2r.s43	MSP430x11x1 - Software Output 6-Bit R2R DAC
MSP430x11x1_rosc.s43	MSP430x11x1 - DCOCLK Biased with External Resistor Rosc
MSP430x11x1_selftest.s43	MSP430x11x1 - Use JTAG for Downloadable Test Code
MSP430x11x1_ta_01.s43	MSP430x11x1 - Timer_A, Toggle P1.0, CCR0 Cont. Mode ISR, DCO SMCLK
MSP430x11x1_ta_02.s43	MSP430x11x1 - Timer_A, Toggle P1.0, CCR0 Up Mode ISR, DCO SMCLK
MSP430x11x1_ta_03.s43	MSP430x11x1 - Timer_A, Toggle P1.0, Overflow ISR, DCO SMCLK
MSP430x11x1_ta_04.s43	MSP430x11x1 - Timer_A, Toggle P1.0, Overflow ISR, 32kHz ACLK
MSP430x11x1_ta_05.s43	MSP430x11x1 - Timer_A, Toggle P1.0, CCR0 Up Mode ISR, 32kHz ACLK
MSP430x11x1_ta_06.s43	MSP430x11x1 - Timer_A, Toggle P1.0, CCR1 Cont. Mode ISR, DCO SMCLK
MSP430x11x1_ta_07.s43	MSP430x11x1 - Timer_A, Toggle P1.0-3, Cont. Mode ISR, DCO SMCLK
MSP430x11x1_ta_08.s43	MSP430x11x1 - Timer_A, Toggle P1.0-3, Cont. Mode ISR, 32kHz ACLK
MSP430x11x1_ta_09.s43	MSP430x11x1 - Timer_A, Toggle P1.0-3, Cont. Mode ISR, HF XTAL ACLK
MSP430x11x1_ta_10.s43	MSP430x11x1 - Timer_A, Toggle P1.1/TA0, Up Mode, DCO SMCLK
MSP430x11x1_ta_11.s43	MSP430x11x1 - Timer_A, Toggle P1.1/TA0, Up Mode, 32kHz ACLK
MSP430x11x1_ta_12.s43	MSP430x11x1 - Timer_A, Toggle P1.1/TA0, Up Mode, HF XTAL ACLK
MSP430x11x1_ta_13.s43	MSP430x11x1 - Timer_A, Toggle P1.1/TA0, Up/Down Mode, DCO SMCLK
MSP430x11x1_ta_14.s43	MSP430x11x1 - Timer_A, Toggle P1.1/TA0, Up/Down Mode, 32kHz ACLK
MSP430x11x1_ta_15.s43	MSP430x11x1 - Timer_A, Toggle P1.1/TA0, Up/Down Mode, HF XTAL ACLK
MSP430x11x1_ta_16.s43	MSP430x11x1 - Timer_A, PWM TA1-2, Up Mode, DCO SMCLK

MSP430x11x1_ta_17.s43	MSP430x11x1 - Timer_A, PWM TA1-2, Up Mode, 32kHz ACLK
MSP430x11x1_ta_18.s43	MSP430x11x1 - Timer_A, PWM TA1-2 Up Mode, HF XTAL ACLK
MSP430x11x1_ta_19.s43	MSP430x11x1 - Timer_A, PWM TA1-2, Up/Down Mode, DCO SMCLK
MSP430x11x1_ta_20.s43	MSP430x11x1 - Timer_A, PWM TA1-2, Up/Down Mode, 32kHz ACLK
MSP430x11x1_ta_21.s43	MSP430x11x1 - Timer_A, PWM TA1-2, Up/Down Mode, HF XTAL ACLK
MSP430x11x1_ta_22.s43	MSP430x11x1 - Timer_A, Output 40kHz Square Wave, Up Mode, DCO SMCLK
MSP430x11x1_ta_23.s43	MSP430x11x1 - Timer_A, Ultra-Low Pwr 1200Hz Detect, ACLK +/- 5%
MSP430x11x1_ta_24.s43	MSP430x11x1 - Timer_A, Ultra-Low Pwr 1800Hz Detect, SMCLK +/- 1%
MSP430x11x1_ta_115k.s43	MSP430x11x1 - Timer_A, UART 115200 Echo, HF XTAL ACLK
MSP430x11x1_ta_19200_01.s43	MSP430x11x1 - Timer_A, UART 19200 Echo, HF XTAL ACLK
MSP430x11x1_ta_19200_02.s43	MSP430x11x1 - Timer_A, Ultra-Low Pwr UART 19200 Echo, 32kHz ACLK
MSP430x11x1_ta_19200_03.s43	MSP430x11x1 - Timer_A, UART 19200 Echo, 32kHz ACLK
MSP430x11x1_ta_19200_04.s43	MSP430x11x1 - Timer_A, Ultra-Low Pwr UART 19200 Echo, No XTAL ROSC
MSP430x11x1_ta_2400.s43	MSP430x11x1 - Timer_A, Ultra-Low Pwr UART 2400 Echo, 32kHz ACLK
MSP430x11x1_ta_9600_01.s43	MSP430x11x1 - Timer_A, UART 9600 Echo, HF XTAL ACLK
MSP430x11x1_ta_9600_02.s43	MSP430x11x1 - Timer_A, Ultra-Low Pwr UART 9600 Echo, 32kHz ACLK
MSP430x11x1_ta_9600_03.s43	MSP430x11x1 - Timer_A, UART 9600 Echo, 32kHz ACLK
MSP430x11x1_ta_9600_04.s43	MSP430x11x1 - Timer_A, Ultra-Low Pwr UART 9600 Echo, No XTAL, ROSC
MSP430x11x1_ta_9600_05.s43	MSP430x11x1 - Timer_A, Ultra-Low Pwr UART 9600 String, 32kHz ACLK
MSP430x11x1_ta_9600_06.s43	MSP430x11x1 - Timer_A, Ultra-Low Pwr UART 9600 Echo, 32kHz ACLK
MSP430x11x1_tmp100.s43	MSP430x11x1 - Software I2C Master Interface to TMP100
MSP430x11x1_tvrc5_rx.s43	MSP430x11x1 - Decode RC5 IR Remote Control, 32kHz ACLK
MSP430x11x1_tvrc5_rx2.s43	MSP430x11x1 - Decode RC5 IR Remote Control, No XTAL, Rosc
MSP430x11x1_tvrc5_tx.s43	MSP430x11x1 - Encode RC5 IR Remote Control, 32kHz ACLK
MSP430x11x1_tvrc5_tx2.s43	MSP430x11x1 - Encode RC5 IR Remote Control, No XTAL, Rosc
MSP430x11x1_wdt_01.s43	MSP430x11x1 - WDT, Toggle P1.0, Interval Overflow ISR, DCO SMCLK
MSP430x11x1_wdt_02.s43	MSP430x11x1 - WDT, Toggle P1.0, Interval Overflow ISR, 32kHz ACLK
MSP430x11x1_wdt_03.s43	MSP430x11x1 - WDT, Toggle P1.0, Interval Overflow ISR, HF XTAL ACLK
MSP430x21x1_2.s43	MSP430x21x1 - Reset on Invalid Address fetch, Toggle P1.0
MSP430x21x1_ca_08.s43	MSP430x21x1 - Comp_A, Millivolt Meter
MSP430x21x1_ca_CASHORT.s43	MSP430x21x1 - Comp_A, Simple 2.2V Low Battery Detect using CASHORT
MSP430x21x1_flashwrite_03.s43	MSP430x21x1 - Flash In-System Programming, Copy SegC to SegD
MSP430x21x1_fll_03.s43	MSP430x21x1 - Basic Clock, Implement Auto RSEL SW FLL
MSP430x21x1_HF_ExtACLK.s43	MSP430x21x1 - Basic Clock, MCLK Sourced from HF Digital source
MSP430x21x1_hfxtal.s43	MSP430x21x1 - Basic Clock, MCLK Sourced from HF XTAL
MSP430x21x1_LF_OFIFG_extclk.s43	MSP430x21x1 - OFIFG ISR for LF Failsafe Operation on Ext Clk
MSP430x21x1_LF_OFIFG_XTAL.s43	MSP430x21x1 - OFIFG ISR for LF Failsafe Operation
MSP430x21x1_pull-up.s43	MSP430x21x1 - 21x1 Pull-up resistors demo
MSP430x21x1_ta_uart115k_12MHz.s43	MSP430x21x1 - Timer_A, UART 115200 Echo, 12MHz DCO SMCLK
MSP430x21x1_ta_uart115k_16MHz.s43	MSP430x21x1 - Timer_A, UART 115200 Echo, 16MHz DCO SMCLK
MSP430x21x1_ta_uart115k_8MHz.s43	MSP430x21x1 - Timer_A, UART 115200 Echo, 8MHz DCO SMCLK
MSP430x21x1_ta_uart9600_1MHz.s43	MSP430x21x1 - Timer_A, Ultra-Low Pwr UART 9600 Echo, 1MHz DCO SMCLK
MSP430x21x1_wdt_04.s43	MSP430x21x1 - WDT+ Failsafe Clock, DCO SMCLK

C code examples – IAR & CCS

File name	Description
MSP430x11x1_1.c	MSP430x11x1 - Software Toggle P1.0
MSP430x11x1_549.c	MSP430x11x1 - Software SPI Interface TLC549, Set P1.0 if > 0.5*Vcc
MSP430x11x1_ca_01.c	MSP430x11x1 - Comp_A, Output Reference Voltages on P2.3
MSP430x11x1_ca_02.c	MSP430x11x1 - Comp_A, Detect Threshold, Set P1.0 if P2.3 > 0.25*Vcc
MSP430x11x1_ca_03.c	MSP430x11x1 - Comp_A, Simple 2.2V Low Battery Detect
MSP430x11x1_ca_04.c	MSP430x11x1 - Comp_A, Slope ADC to Detect Temp Lvl, Set P1.0 > 25C
MSP430x11x1_clks.c	MSP430x11x1 - Basic Clock, Output Buffered SMCLK, ACLK and MCLK/10

MSP430x11x1_flashwrite_01.c	MSP430x11x1 - Flash In-System Programming, Copy SegA to SegB
MSP430x11x1_fll_01.c	MSP430x11x1 - Basic Clock, Implement Auto RSEL SW FLL
MSP430x11x1_fll_02.c	MSP430x11x1 - Basic Clock, Implement Cont. SW FLL with Auto RSEL
MSP430x11x1_hfxtal.c	MSP430x11x1 - Basic Clock, MCLK Sourced from HF XTAL
MSP430x11x1_lpm3.c	MSP430x11x1 - Basic Clock, LPM3 Using WDT ISR, 32kHz ACLK
MSP430x11x1_nmi.c	MSP430x11x1 - Basic Clock, Configure RST/NMI as NMI
MSP430x11x1_P2_int.c	MSP430x11x1 - Software Port Interrupt Service on P2.0 from LPM4
MSP430x11x1_P2_poll.c	MSP430x11x1 - Software Poll P2.0, Set P1.0 if P2.0 = 1
MSP430x11x1_rosc.c	MSP430x11x1 - DCOCLK Biased with External Resistor Rosc
MSP430x11x1_ta_01.c	MSP430x11x1 - Timer_A, Toggle P1.0, CCR0 Cont. Mode ISR, DCO SMCLK
MSP430x11x1_ta_02.c	MSP430x11x1 - Timer_A, Toggle P1.0, CCR0 Up Mode ISR, DCO SMCLK
MSP430x11x1_ta_03.c	MSP430x11x1 - Timer_A, Toggle P1.0, Overflow ISR, DCO SMCLK
MSP430x11x1_ta_04.c	MSP430x11x1 - Timer_A, Toggle P1.0, Overflow ISR, 32kHz ACLK
MSP430x11x1_ta_05.c	MSP430x11x1 - Timer_A, Toggle P1.0, CCR0 Up Mode ISR, 32kHz ACLK
MSP430x11x1_ta_06.c	MSP430x11x1 - Timer_A, Toggle P1.0, CCR1 Cont. Mode ISR, DCO SMCLK
MSP430x11x1_ta_07.c	MSP430x11x1 - Timer_A, Toggle P1.0-3, Cont. Mode ISR, DCO SMCLK
MSP430x11x1_ta_08.c	MSP430x11x1 - Timer_A, Toggle P1.0-3, Cont. Mode ISR, 32kHz ACLK
MSP430x11x1_ta_09.c	MSP430x11x1 - Timer_A, Toggle P1.0-3, Cont. Mode ISR, HF XTAL ACLK
MSP430x11x1_ta_10.c	MSP430x11x1 - Timer_A, Toggle P1.1/TA0, Up Mode, DCO SMCLK
MSP430x11x1_ta_11.c	MSP430x11x1 - Timer_A, Toggle P1.1/TA0, Up Mode, 32kHz ACLK
MSP430x11x1_ta_12.c	MSP430x11x1 - Timer_A, Toggle P1.1/TA0, Up Mode, HF XTAL ACLK
MSP430x11x1_ta_13.c	MSP430x11x1 - Timer_A, Toggle P1.1/TA0, Up/Down Mode, DCO SMCLK
MSP430x11x1_ta_14.c	MSP430x11x1 - Timer_A, Toggle P1.1/TA0, Up/Down Mode, 32kHz ACLK
MSP430x11x1_ta_15.c	MSP430x11x1 - Timer_A, Toggle P1.1/TA0, Up/Down Mode, HF XTAL ACLK
MSP430x11x1_ta_16.c	MSP430x11x1 - Timer_A, PWM TA1-2, Up Mode, DCO SMCLK
MSP430x11x1_ta_17.c	MSP430x11x1 - Timer_A, PWM TA1-2, Up Mode, 32kHz ACLK
MSP430x11x1_ta_18.c	MSP430x11x1 - Timer_A, PWM TA1-2, Up Mode, HF XTAL ACLK
MSP430x11x1_ta_19.c	MSP430x11x1 - Timer_A, PWM TA1-2, Up/Down Mode, DCO SMCLK
MSP430x11x1_ta_20.c	MSP430x11x1 - Timer_A, PWM TA1-2, Up/Down Mode, 32kHz ACLK
MSP430x11x1_ta_21.c	MSP430x11x1 - Timer_A, PWM TA1-2, Up/Down Mode, HF XTAL ACLK
MSP430x11x1_ta_uart115k.c	MSP430x11x1 - Timer_A, UART 115200 Echo, HF XTAL ACLK
MSP430x11x1_ta_uart19200_01.c	MSP430x11x1 - Timer_A, UART 19200 Echo, HF XTAL ACLK
MSP430x11x1_ta_uart2400.c	MSP430x11x1 - Timer_A, Ultra-Low Pwr UART 2400 Echo, 32kHz ACLK
MSP430x11x1_ta_uart9600_01.c	MSP430x11x1 - Timer_A, UART 9600 Echo, HF XTAL ACLK
MSP430x11x1_ta_uart9600_02.c	MSP430x11x1 - Timer_A, Ultra-Low Pwr UART 9600 Echo, 32kHz ACLK
MSP430x11x1_ta_uart9600_03.c	MSP430x11x1 - Timer_A, UART 9600 Echo, 32kHz ACLK
MSP430x11x1_ta_uart9600_04.c	MSP430x11x1 - Timer_A, Ultra-Low Pwr UART 9600 Echo, No XTAL, ROSC
MSP430x11x1_ta_uart9600_05.c	MSP430x11x1 - Timer_A, Ultra-Low Pwr UART 9600 String, 32kHz ACLK
MSP430x11x1_wdt_01.c	MSP430x11x1 - WDT, Toggle P1.0, Interval Overflow ISR, DCO SMCLK
MSP430x11x1_wdt_02.c	MSP430x11x1 - WDT, Toggle P1.0, Interval Overflow ISR, 32kHz ACLK
MSP430x11x1_wdt_03.c	MSP430x11x1 - WDT, Toggle P1.0, Interval Overflow ISR, HF XTAL ACLK
MSP430x21x1_2.c	MSP430x21x1 - Reset on Invalid Address fetch, Toggle P1.0
MSP430x21x1_ca_05.c	MSP430x21x1 - Comp_A, Millivolt Meter
MSP430x21x1_ca_06.c	MSP430x21x1 - Comp_A, Slope ADC to measure temperature
MSP430x21x1_ca_CASHORT.c	MSP430x21x1 - Comp_A, Simple 2.2V Low Battery Detect using CASHORT
MSP430x21x1_flashwrite_03.c	MSP430x21x1 - Flash In-System Programming, Copy SegC to SegD
MSP430x21x1_flashwrite_04.c	MSP430x21x1 - Flash In-System Programming w/ EEI, Copy SegC to SegD
MSP430x21x1_fll_03.c	MSP430x21x1 - Basic Clock, Implement Auto RSEL SW FLL
MSP430x21x1_HF_ExtACLK.c	MSP430x21x1 - Basic Clock, MCLK Sourced from HF Digital source
MSP430x21x1_hfxtal.c	MSP430x21x1 - Basic Clock, MCLK Sourced from HF XTAL
MSP430x21x1_LF_ExtACLK.c	MSP430x21x1 - LF Mode Ext Digital Clk source
MSP430x21x1_LF_OFIFG_extclk.c	MSP430x21x1 - OFIFG ISR for LF Failsafe Operation on Ext Clk
MSP430x21x1_LF_OFIFG_XTAL.c	MSP430x21x1 - OFIFG ISR for LF Failsafe Operation
MSP430x21x1_Pull-up.c	MSP430x21x1 - 21x1 Pull-up resistors demo
MSP430x21x1_ta_uart115k_12MHz.c	MSP430x21x1 - Timer_A UART 115k, 12MHz DCO SMCLK
MSP430x21x1_ta_uart115k_16MHz.c	MSP430x21x1 - Timer_A UART 115k, 16MHz DCO SMCLK

MSP430x21x1_ta_uart115k_8MHz.c	MSP430x21x1 - Timer_A UART 115k, 8MHz DCO SMCLK
MSP430x21x1_ta_uart19200_1MHz.c	MSP430x21x1 - Timer_A UART 19200 TX, 1MHz DCO
MSP430x21x1_ta_uart9600_1MHz.c	MSP430x21x1 - Timer_A UART 9600, 1MHz DCO SMCLK
MSP430x21x1_wdt_04.c	MSP430x21x1 - WDT+ Failsafe Clock, DCO SMCLK

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